

U.S. ENVIRONMENTAL PROTECTION AGENCY
 POLLUTION/SITUATION REPORT
 Bautsch Gray Mine Site - Removal Polrep



**UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
 Region V**

Subject: **POLREP #2**
 Site Update
 Bautsch Gray Mine Site
 B5TS
 Jo Daviess County, IL
 Latitude: 42.3574200 Longitude: -90.3985700

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From: Leonard Zintak, On-Scene Coordinator
Date: 9/24/2010
Reporting Period: 09/18/10 - 09/24/10

1. Introduction

1.1 Background

Site Number:	B5TS	Contract Number:	EP-S5-08-04
D.O. Number:		Action Memo Date:	5/17/2010
Response Authority:	CERCLA	Response Type:	Time-Critical
Response Lead:	EPA	Incident Category:	Removal Action
NPL Status:	Non NPL	Operable Unit:	NA
Mobilization Date:	9/9/2010	Start Date:	9/9/2010
Demob Date:		Completion Date:	
CERCLIS ID:	TBD	RCRIS ID:	TBD
ERNS No.:	NA	State Notification:	Yes
FPN#:	NA	Reimbursable Account #:	NA

1.1.1 Incident Category

Time-Critical Removal Action

1.1.2 Site Description

The approximately 80-acre area of contamination is composed of the remnants of a former lead and zinc mining operation and two residential properties. The main tailings pile area is approximately 55-acres in size and is located on the east side of Blackjack Road. Road ditch areas along Blackjack Road have also been impacted by the contaminated mine tailings as well as residential property. The Bautsch Gray Mine Site is being proposed for the National Priorities List (NPL).

1.1.2.1 Location

The Site is about 4 miles south of Galena, in Jo Daviess County, Illinois. The Site is located in a rural agricultural and residential area and is bordered to the north, south, and east by residential properties and agricultural land, and to the west by Blackjack Road and residential areas. The tailings have been migrating onto the two residential properties to the west of Blackjack Road. The geographical coordinates for the Site are Latitude 42.3574200 and Longitude -90.3985700.

1.1.2.2 Description of Threat

The Site is composed of the remnants of a former lead and zinc mining operation dating back to the early 1900's. Elevated levels of lead and arsenic have been detected in soil and tailings on and around the site. Elevated levels of lead have been found in a residential well adjacent to the site. Also elevated lead levels have been found in drainage ditches along Blackjack Road as well as in nearby Smallpox Creek.

1.1.3 Preliminary Removal Assessment/Removal Site Inspection Results

During the week of October 6 through 8, 2009, U.S. EPA and the START contractor conducted a site assessment (SA) at the Bautsch Gray Site. In summary, U.S. EPA collected 36 surface soil samples and field screened Site soils with an x-ray fluorescence (XRF) instrument (InnovX). Residential well and surface water samples were also taken. Lead and arsenic results exceeding the action levels and cleanup levels were found around the mine tailings pile, in and around the road ditches along Blackjack Rd. and on adjacent residential areas.

2. Current Activities**2.1 Operations Section****2.1.1 Narrative**

Work at the Site continues this week. The primary focus has been on the residential cleanup at 746 S. Blackjack Road, and on the Stormwater Diversion Ditch east and north of the tailings pile.

2.1.2 Response Actions to Date

Approximately 900 cubic yards of contaminated soil and mine tailings have been removed from the 746 S. Blackjack residential property. The excavation depth varies from 6 inches to 18 inches. The bottom of the excavated area has been screened with the XRF and samples have been collected for lab analysis. Lab results indicate that about 1/3 of the excavated area is ready for backfill with clean topsoil. Air monitoring continues and indicates only background particulate levels. We are awaiting air sampling results.

2.1.3 Enforcement Activities, Identity of Potentially Responsible Parties (PRPs)

The PRPs for the site have installed a reverse osmosis (RO) drinking water filtration system at the home at 746 S. Blackjack Rd. under an Administrative Order by Consent (AOC). Filter installation on the private well was completed in July 2010, and operation and maintenance by the PRPs will continue for two years.

2.1.4 Progress Metrics

It is currently estimated that approximately 1400 cubic yards of contaminated soil will be removed from the residential property at 746 S. Blackjack Rd. during the week of September 20 through October 1, 2010. This soil will be moved to the tailings pile area east of Blackjack Rd.

<i>Waste Stream</i>	<i>Medium</i>	<i>Quantity</i>	<i>Manifest #</i>	<i>Treatment</i>	<i>Disposal</i>

2.2 Planning Section

2.2.1 Anticipated Activities

The objective of this removal action is to stabilize the mine tailings pile to prevent the off-site migration of lead and arsenic contaminated tailings onto Blackjack Road and adjacent residential property by diverting clean up-gradient stormwater around the tailing pile and by constructing retention ponds on the tailings area to reduce the velocity and volume of water moving through the site during large storm events.

Excavation of contaminated soil began on residential property on 09/17/10. This lead and arsenic contaminated soil will continue to be transported across Blackjack Road to the mine tailings pile during the week of 09/27/10. The excavation on the residential area is about 65% complete. The excavation will be completed next week.

A topographic survey of the route for the diversion ditch D will be conducted next week. The route survey for diversion ditch A,B,C will also be conducted at the northeast perimeter of the site. See attached 2010 Stormwater Plan figure. The geotechnical analysis of the tailings will

be received today. This information will be used to design the retention pond berms on the site.

2.2.1.1 Planned Response Activities

Removal of contaminated soil from the 746 S. Blackjack Rd. residential property will be completed. Clean backfill replacement will occur in the excavated areas after confirmation sampling has been completed and results indicate levels below cleanup objectives. Sampling of the clean backfill has occurred for several sources. A source of clean topsoil is being evaluated and will be selected next week.

2.2.1.2 Next Steps

On-site evaluation of conditions of the Retention Pond 1 area has indicated that substantial additional effort would be required to build the pond according to the previous conceptual design due to tailings conditions, therefore a revised approach has been developed and will involve expanding Pond 2 and Pond 5. Pond 1 issues will be addressed prior to implementation of construction in spring 2011.

Detailed design of retention ponds and the storm water diversion ditch and related structures is continuing. Laboratory testing of the properties of the berm and pond materials (tailings) is being conducted by a laboratory in Dubuque, IA. Analysis includes: Proctor Density Tests, Specific Gravity, Moisture Content, Atterburg Limit Tests, Unconfined Compression, Triaxial Compression, and Permeability. A licensed surveyor will be used next week to confirm berm and pond locations and elevations as well as the route and elevations of the stormwater diversion ditch. Cross section design diagrams have been completed for sections A-D of the stormwater diversion ditch. Design of the retention pond outfall structures for Ponds 2,3,4 are complete.

2.2.2 Issues

Retention Pond 1 including the tailings berm along Blackjack Road will require additional engineering evaluation prior to re-mobilization to the site in spring 2011. The structural integrity of the berm requires evaluation due to the presence of highly saturated, clay-like material at its base. Additional geotechnical analysis is planned for October and November.

Work on the 798 S. Blackjack residential property (Horseshoe-Shaped Tailings Deposition Area) will not begin until spring 2011 due to the approaching winter weather which would not allow for site work and restoration to continue.

The Bautsch Gray Mine Site is being scored for the NPL.

2.3 Logistics Section

Not applicable.

2.4 Finance Section

2.4.1 Narrative

START Cost to Date:

-Design: \$51,000.00

-Cost Estimate: \$18,000.00

-Site: \$41,000.00

Note corrects were made from the numbers reported in Pol Rep #1.

Estimated Costs *

	Budgeted	Total To Date	Remaining	% Remaining
Extramural Costs				
ERRS - Cleanup Contractor	\$800,000.00	\$141,265.83	\$658,734.17	82.34%
TAT/START	\$151,000.00	\$110,500.00	\$40,500.00	26.82%
Intramural Costs				
Total Site Costs	\$951,000.00	\$251,765.83	\$699,234.17	73.53%

* The above accounting of expenditures is an estimate based on figures known to the OSC at the time this report was written. The OSC does not necessarily receive specific figures on final payments made to any contractor(s). Other financial data which the OSC must rely upon may not be entirely up-to-date. The cost accounting provided in this report does not necessarily represent an exact monetary figure which the government may include in any claim for cost recovery.

2.5 Safety Officer

Site safety is good. ERRS is utilizing flaggers on Blackjack Road to stop traffic when trucks move soil from the residential area to the tailings pile.

2.6 Liaison Officer

Not applicable.

2.7 Information Officer

USEPA and Illinois EPA attended a meeting of the Executive Committee of the Jo Daviess County Board on September 7, 2010 and presented to the committee an overview of the cleanup project and a schedule of planned activities.

The Galena Gazette newspaper printed an article about the site on September 15, 2010.

Two Public Open House Sessions are scheduled for October 6, 2010 at the Rice Township Maintenance Facility near the site.

3. Participating Entities

3.1 Unified Command

Not applicable.

3.2 Cooperating and Assisting Agencies

Illinois Environmental Protection Agency (ILEPA)

Jo Daviess County

Agency for Toxic Substances and Disease Registry (ATSDR)

4. Personnel On Site

1 EPA OSC

11 ERRS – LATA/Kemron and CMC

2 START – Weston Solutions

5. Definition of Terms

ERRS – Emergency and Rapid Response Services

ILEPA – Illinois Environmental Protection Agency

NPL -- National Priorities List (U.S. EPA)

OSC -- On-Scene Coordinator

RCRA – Resource Conservation and Recovery Act

START – Superfund Technical Assessment and Response Team

U.S. EPA – United States Environmental Protection Agency

6. Additional sources of information

6.1 Internet location of additional information/reports

For additional information, please refer to www.epaosc.org/.bautschgraymine.

6.2 Reporting Schedule

The next POLREP (#2) will be submitted next week.

7. Situational Reference Materials

For additional information, please refer to www.epaosc.org/bautschgraymine

